No student reviews

(kp)

(1090)

ecology and environment, inc.

160 SPEAR STREET, SAN FRANCISCO, CALIFORNIA 94105, TEL. 415/777-2811

International Specialists in the Environment

MEMORANDUM

TO: Ginny Cummings, EPA Region IX

FROM: Jim James, Ecology and Environment, Inc. JMJ

DATE: June 29, 1990

SUBJECT: Completed Work

cc: Marcia Brooks, E & E FIT

Attached is the following completed:

PA___ PA Review___ SSI___ LSI___ SIRe___

Other LSI Prioritization Memo

Site Name: J & E Machine

EPA ID #: CAD041473216

City, County: Scotts Valley, Santa Cruz County

State Recommendation:
(for Reviews only)

FOR EPA USE ONLY

CERCLIS Lead:

kal/jem/cwm

ecology and environment, inc.
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International Specialists in the Environment

*****CONFIDENTIAL*****PREDECISIONAL DOCUMENT*****

LSI PRIORITIZATION CRITERIA

SUBMITTED TO: M.V. Cummings, Site Assessment Manager, EPA Region IX

PREPARED BY: Kenyon A. Larsen, Ecology and Environment, Inc. KAL

THROUGH: Su-san Wen, Ecology and Environment, Inc. SW

DATE: June 29, 1990

SITE: J & E Machine
5998 Butler Lane
Scotts Valley, California
Santa Cruz County

EPA ID#: CAD041473216

FIT REVIEW/CONCURRENCE: James M. James 6/27/90

cc: FIT Master File

Ecology and Environment, Inc.'s Field Investigation Team (E & E FIT) evaluated each of the following criteria in order to assist the U.S. Environmental Protection Agency (EPA) in determining if this site is appropriate for LSI consideration.

PROFILE OF SITE

The J & E Machine site is located at 5998 Butler Lane, Scotts Valley, Santa Cruz County, California (see Figure 1, Site Location Map). J & E Machine operated at the site from 1980 until about 1985. J & E Machine was owned by N/C Mattic, Inc. and operated by Ernest and Judy Pitts until it went bankrupt in 1986. In November 1985 Ashland Machine began operation at the site under the ownership of Scott Pitts, the son of Ernest and Judy Pitts. Ernest Pitts is currently the manager of Ashland Machine. The facility is approximately 1 acre in size (1).

J & E Machine manufactured various metal blocks, bars, rods, and other machine components. Approximately 55 to 110 gallons of raw trichloroethylene (TCE) were used annually to degrease machined components in a vapor

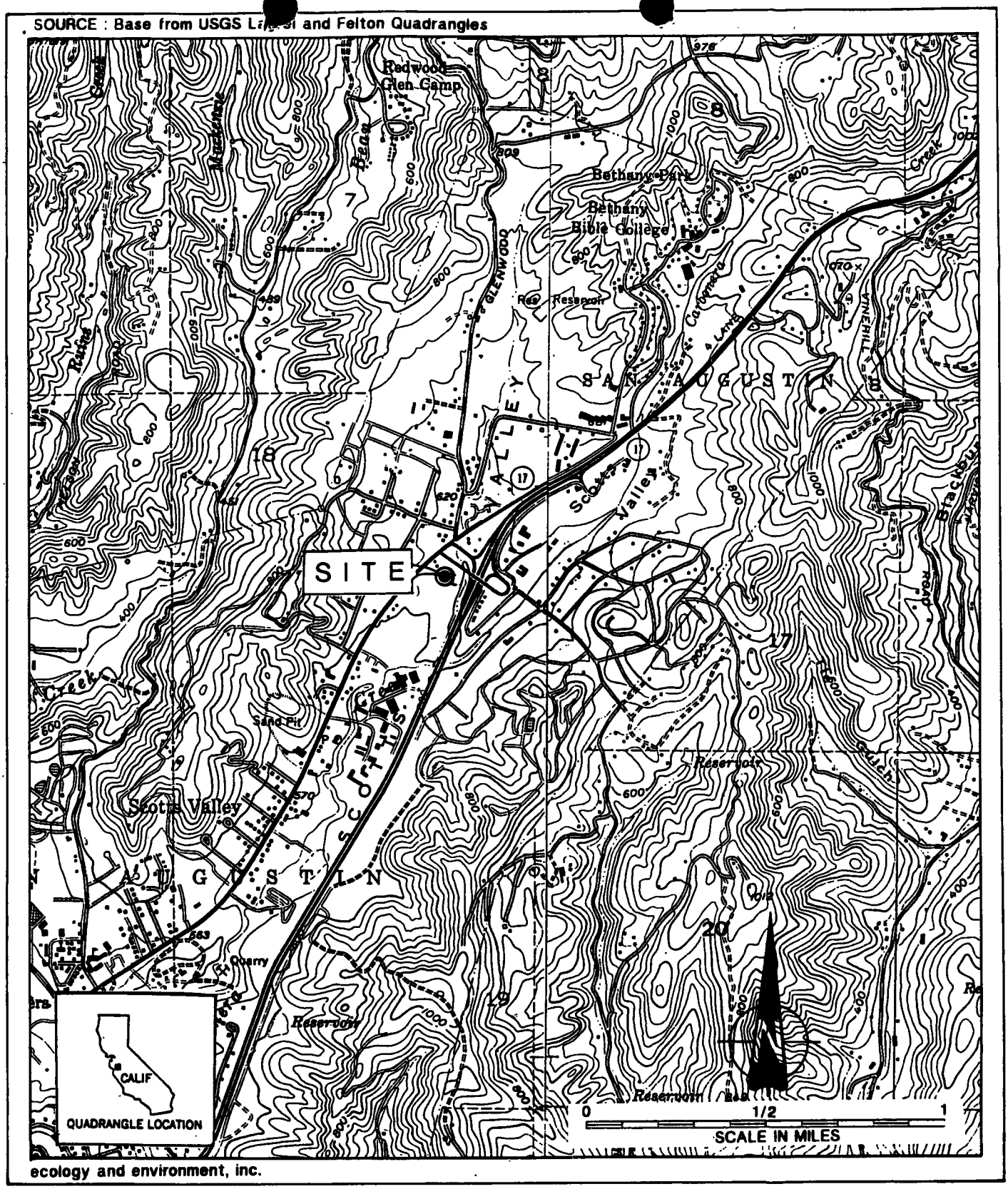

Figure 1 SITE LOCATION MAP

J & E MACHINE

5998 BUTLER LANE
SCOTTS VALLEY, CA 95066

degreaser. Other materials used on site included motor oil and an acetone-based product called Dykem. Kerosene was also used in the past for degreasing at J & E Machine (6).

Ashland Machine employs basically the same machining processes that J & E Machine used, except that Ashland Machine has never used solvents in its processes on site. Ashland Machine uses a mixture of Ajax cleanser and rocks to remove metal burs from the machined parts produced at the facility. The water from the bur removing process is then discharged into the municipal sewer system (1).

PROPOSED REVISED HRS SCORE

20.33

All four pathways were evaluated using the Revised Hazard Ranking System (rHRS). The preadjusted score for J & E Machine is 20.33.

Waste oils and waste TCE were collected in 55-gallon drums and stored inside the rear of the main building until it could be hauled off-site. The amount of waste TCE hauled off site (approximately 110 gallons of oil/TCE waste between 1980 and 1984) was much less than the amount of raw TCE (approximately 350 gallons) used during the same period of time. According to J & E Machine, this difference can be accounted for by evaporation. Another waste storage area located on site was used to store rinsewater from processes used by J & E Machine. It is unknown to FIT the contents or the quantity of waste rinsewater stored in this area. According to an RWQCB inspection, this rinsewater was discharged to the ground and then flowed into an adjacent intermittent creek (5,12).

A release of contaminants to groundwater has not been documented at the site. No groundwater sampling has been conducted at the J & E Machine site. Municipal drinking water wells near the J & E Machine site have shown elevated levels of TCE and other contaminants. The closest known contaminated municipal well to J & E Machine is the Scotts Valley Water District--El Pueblo Drive Well #3A, which lies approximately 0.5 mile south and hydraulically downgradient of the site. A sampling effort conducted by the California Department of Health Services (DOHS) at Well #3A showed TCE levels above 3.0 parts per billion (ppb) (7). Although TCE has been detected in municipal drinking wells located approximately 0.5 mile south of the site, this regional groundwater contamination has not been attributed to any specific site (9).

The unconfined Santa Margarita aquifer, which is a federally designated Sole Source Aquifer, lies approximately 60 feet below ground surface (bgs). The Santa Margarita aquifer is overlain by a topsoil layer about 8 feet thick and a sandstone layer between 8 and 60 feet bgs. A perched water zone may exist in the topsoil layer in the area of J & E Machine. Groundwater in this area flows in a southward direction (18,19). Private and municipal wells within 4 miles of the site draw from the Santa Margarita aquifer to provide water through an

interconnected, blended system for approximately 8,500 residents in the Scotts Valley area (10,11).

There is no documentation of an observed release of contaminants to surface water from the J & E Machine site. The site is adjacent to an intermittent stream that flows directly into Carbonero Creek which empties into the San Lorenzo River and then the Pacific Ocean approximately 7 miles downstream of the site (13). Carbonero Creek is used for recreational fishing and camping downstream from the J & E Machine site. Carbonero Creek is also a spawning tributary of the San Lorenzo River for steelhead trout and Chinook salmon (2). Fish catch downstream from J & E Machine was estimated to be 5,000 pounds per year in the San Lorenzo River and 500 pounds per year in Carbonero Creek (14). Fish catch information was estimated for the Pacific Ocean at 1,800,192 pounds per year (15). There are surface water intakes used for drinking water in the city of Santa Cruz, however these intakes are upstream from the confluence of Carbonero Creek and the San Lorenzo River (4).

The air and on-site expsoure pathways were evaluated using the rHRS. However, no wastes are currently available at the site to release to air or to expose humans or the environment. Waste materials stored on site were removed in 1984 (17). According to the current operator, Ashland Machine, hazardous materials are not used in any processes on site and the site is entirely paved (1).

OTHER AGENCY INVOLVEMENT

1. PRESENT AND FUTURE STATE INVOLVEMENT

The California Department of Health Services (DOHS) and the Central Coast Regional Water Quality Control Board (RWQCB) are currently conducting a study of groundwater contamination in the federally designated Sole Source Santa Margarita aquifer. DOHS is the lead agency investigating sites potentially contributing to the contamination plume, known as the El Pueblo Road Plume. J & E Machine is one of the sites included in this investigation (3,8).

The El Pueblo Road Plume is currently listed in the DOHS Bond Expenditure Plan (BEP) for 1989. The BEP states a Remedial Action Certification date of March 1994 (9).

2. OTHER REGULATORY AGENCY INVOLVEMENT

The Scotts Valley Water District has assisted DOHS in monitoring local wells for groundwater contamination (7).

The City of Scotts Valley Fire Department (SVFD) currently oversees the management of hazardous materials in Scotts Valley (16).

Presently neither J & E Machine nor the current owner of the site, Ashland Machine, is listed in the Resource Conservation and Recovery Act database dated June 1989.

3. SITE OWNER/OPERATOR INVOLVEMENT

J & E Machine was owned by N/C Mattic, Inc. and operated by Ernest and Judy Pitts until it went bankrupt in 1986. The current operator at the site is Ashland Machine which is owned by Scott Pitts (1). The financial status of Ashland Machine is unknown to FIT.

VISIBILITY FACTOR

The regional groundwater contamination in the El Pueblo Road area was discovered in 1984. The general public has not shown significant interest in this water supply problem. J & E Machine is one of several sites in the El Pueblo Road area under investigation by DOHS as part of the contamination plume study. A Community Relations plan has been implemented to educate the general public about the regional groundwater contamination problem. Information and fact sheets have been made available to the general public. There appears to have been little or no media coverage of the J & E Machine site (8).

REPRESENTATIVE SCORE

The hazardous waste quantity at the site appears to be quite small and the rHRS default value may not be representative of the actual waste quantity. In addition, the surface water pathway food chain default value for the Pacific Ocean may overestimate the actual problem at the site.

ADDITIONAL CRITERIA FACTORS

1. ACTUAL RELEASE

An actual release has not been documented at the site. Although TCE has been detected in municipal drinking wells located approximately 0.5 mile south of the former J & E Machine facility, this regional groundwater contamination has not been attributed to the site (9).

2. TOXICITY OF CONTAMINANTS

An actual release has not been documented at the site.

3. WASTE CHARACTERISTICS

Two 55-gallon drums of TCE waste solvent were stored on site. No analysis was conducted to determine the exact concentrations of contaminants in these drums. The characteristics of the rinsewater wastes are unknown to FIT, however, this waste was considered to be hazardous for the purposes of this investigation. The quantity of the rinsewater waste is also unknown to FIT (5,12,17).

4. TARGET POPULATION

The City of Scotts Valley Well #3A and wells in the San Lorenzo Water district provide drinking water for approximately 8,500 persons in the Scotts Valley area (10,11).

5. SENSITIVE ENVIRONMENTS

The former J & E Machine site is adjacent to an intermittent stream that flows directly into Carbonero Creek. Carbonero Creek is a spawning tributary of the San Lorenzo River for steelhead trout and Pacific salmon (2). However, since no actual contamination has been documented in Carbonero Creek from J & E Machine, only a potential for affecting these sensitive environments was evaluated.

kal/j&e/prior

REFERENCES

1. Pitts, Judy, Ashland Machine Bookkeeper, and Kenyon A. Larsen, Ecology and Environment, Inc., Field Investigation Team (E & E FIT) telephone conversation, August 29, 1989.

2. Getty, Maurice, District Superintendent Santa Cruz Mountain District State Parks, and Kenyon A. Larsen, E & E FIT, telephone conversation, June 26, 1989.

3. Boyer, Gene, California Department of Health Services, and Kim Hall, E & E FIT, telephone conversation, June 22, 1989.

4. Watson, Gene, Santa Cruz Municipal Utilities, and Steve Wisbaum, E & E FIT, telephone conversation, July 5, 1985.

5. Jones, Kenneth, California Regional Water Quality Control Board, to J & E Machine, letter re: Items noted during site inspection, September 13, 1984.

6. Pitts, Ernest, J & E Machine, to Harry Seraydarian, U.S. EPA, letter re: Response to EPA request for information about J & E Machine, February 5, 1986.

7. Scotts Valley Water District, Sampling Results for Wells in the Scotts Valley Study Area, June 12, 1984 to January 21, 1986.

8. Boyer, Gene, DOHS, and Kim Hall, E & E FIT, telephone conversation, June 28, 1989.

9. California Department of Health Services, Expenditure Plan for the Hazardous Substances Cleanup Bond Act of 1984, January 1985 (Revised January 1989).

10. Spring, Roxanne, San Lorenzo Valley Water District, and Kim Hall, E & E FIT, telephone conversation, June 6, 1990.

11. Ellis, Daryll, Scotts Valley Water District, and Alice Glasner, E & E FIT, telephone conversation, May 16, 1990.

12. Pitts, Ernest, J & E Machine, to Jeff Rosenbloom, U.S. EPA Region IX, letter re: Response to CERCLA Screening Site Inspection, November 25, 1985.

13. U.S. Geological Survey, 7.5-minute Topographic Maps of Felton and Santa Cruz, California, 1955 (Photorevised 1985).

14. Hope, Dave, Santa Cruz County Watershed Management, and Tara Abbott, E & E FIT, telephone conversation, June 30, 1989.

kal/j&e/prior

15. Federal Register, Vol. 53, No. 247, Proposed Rules, 52029-52030, December 23, 1988.

16. Angel, Mel, Scotts Valley Fire Department Chief, and Kenyon A. Larsen, E & E FIT, telephone conversation, June 13, 1990.

17. Pitts, Ernest, J & E Machine, to Kenneth Jones, Central Coast Regional Water Quality Control Board, letter re: Response to RWQCB Inspection and Citation, September 27, 1984.

18. David Keith Todd Consulting Engineers, Inc., "Scotts Valley Water Resources Management Plan," Berkeley, California, June 1986.

19. Sansing, John, Scotts Valley Water District, and Kenyon A. Larsen, E & E FIT, telephone conversation, May 15, 1990.

kal/j&e/prior

CONTACT REPORT

AGENCY: Santa Cruz Municipal Utilities

ADDRESS: 809 Center Street,

PERSON CONTACTED: Gene Watson - Assistant Director

PHONE NO.: (408) 429-3666

FROM: Steve Wisbaum

TO: CERCLIS File

DATE: July 5, 1985

SUBJECT: Background information on uses of Carbonera and Bean Creeks

The following information was obtained from Mr. Watson:

The City of Santa Cruz utilizes water from the San Lorenzo River as a drinking water supply. Bean Creek is tributary to the River and is upstream from the City's two water intakes. One of these intakes is located just south of the town of Felton approximately 200 yards north of the U.S.G.S. Stream Guage Station. (Approximately 4 stream miles downstream of Scotts Valley sites.) The second intake is located at Tait Street approximately 2 miles North of Highway 1. An excess of 40,000 people are serviced by Santa Cruz Municipal Water supplies.

Carbonera Creek is also tributary to the San Lorenzo River but empties into the River downstream from the City's intakes.

CONTACT REPORT

AGENCY/AFFILIATION: Department of Health Services (DOHS)		
DEPARTMENT : Toxics		
ADDRESS/CITY: 2151 Berkeley Way, Annex 7		
COUNTY/STATE/ZIP: Berkeley, CA		
CONTACT(S)	**TITLE**	**PHONE**
1. Gene Boyer		540-3433
2.		
E & E PERSON MAKING CONTACT: Kim Hall		**DATE:** 6/22/89
SUBJECT: Scotts Valley SI-RE Sites		
SITE NAME: J & E Machine		**EPA ID#:** CAD041473216

1) SI-RE Sites incorporated in El Pueblo Road Plume study area.

- Assembly Services
- Ferranti Interdesign
- Instrument Graphics
- Jamie Hood Speed and Machine
- J & E Machine
- Kings Cleaners
- Pettibone Signs
- Rank Electronics
- Scotts Valley Circuits
- Seagate Technology
- Tapemation Machine

Sites not included in the groundwater plume are:

2) - Sky Park Leachfield
- Sky Park Airport

Contact Richard Brown (805) 549-3147

wp/kh/scotts/cr

CONTACT REPORT

AGENCY/AFFILIATION: Santa Cruz Mountain District State Parks		
DEPARTMENT :		
ADDRESS/CITY: 101 North Big Trees Park Road/Felton		
COUNTY/STATE/ZIP: Santa Cruz, CA 95018		
CONTACT(S)	**TITLE**	**PHONE**
1. Maurice Getty	District Superintendent	(408) 335-9145
2.		
E & E PERSON MAKING CONTACT: Kenyon A. Larsen		**DATE:** 6/26/89
SUBJECT: Parks & Wildlife Near San Lorenzo River & Tributaries		
SITE NAME: J & E Machine		**EPA ID#:** CAD041473216

Mr. Getty stated that there is an overnight campground at Henry Cowell State Park.

Mr. Getty also mentioned that bobcats, mountain lions, pileated woodpeckers, and several types of raptors live in the area.

He also said that the San Lorenzo River is a spawning ground for steelhead trout and Chinook salmon. Presently there is a project to reintroduce these fish species to the SLR and its tributaries to increase their numbers. The SLR is also a trout stream. Fishing on the River is regulated to 2-3 days per week.

mi/ta/scottsV/cr

CONTACT REPORT

AGENCY/AFFILIATION: CA Dept. of Health Services		
DEPARTMENT : Toxics		
ADDRESS/CITY: 2151 Berkeley Way, Annex 7		
COUNTY/STATE/ZIP: Berkeley, CA		
CONTACT(S)	**TITLE**	**PHONE**
1. Gene Boyer		540-3433
2.		
E & E PERSON MAKING CONTACT: Kim Hall		**DATE:** 6/28/89
SUBJECT: Scotts Valley Sites		
SITE NAME: J & E Machine		**EPA ID#:** CAD041473216

1) The El Pueblo Road Groundwater Plume includes: TCE, TCA, benzene, toluene.

2) Soil samples from Scotts Valley Circuits (SVC) show contamination of TCE, and cis 1-2 dichloroethene. Water samples taken from holes-bored to approximately 8 ft. have shown toluene and TCE contamination as well as 1-chloro, 3-methylbenzene and 2 unknown aromatics.

3) Gene Boyer had to submit a Site Specific Request for Information which required SVC by law to send him the results from soil sampling done at the facility.

4) RWQCB, DOHS, and The City of Scotts Valley are active in the remedial investigation (RI). Bob Geyer at The Scotts Valley Sanitation District is a good contact.

5) There is a Community Relations Plan in place, including a repository of information and fact sheets.

wp/kh/scotts/cr

CONTACT REPORT

AGENCY/AFFILIATION: County Plannning		
DEPARTMENT : County Watershed Management		
ADDRESS/CITY:		
COUNTY/STATE/ZIP: Santa Cruz County, California		
CONTACT(S)	**TITLE**	**PHONE**
1. Dave Hope		(408) 425-2849
2.		
E & E PERSON MAKING CONTACT: Tara Abbott		**DATE:** 6/30/89
SUBJECT: Surface Water Information		
SITE NAME: J & E Machine	**EPA ID#:** CAD041473216	

Approximate averages of fish legally caught per year are 35 in Carbonero Creek, 45 in Bean Creek, and 550 in San Lorenzo River. An estimated 350 additional fish are illegally caught in the river.

Mostly steelhead are caught (only 30-70 salmon caught per year) averaging weight of 8-9 lbs. Salmon average 12-13 lbs.

	Average Annual flow	Average width at mean flow rate
Carbonero Creek	1.5 cfs	6 ft.
Bean Creek	1.5 cfs	6 ft.
San Lorenzo River	6 cfs	30 ft.

Call Randy Benthin at Monterey Fish and Game for totals of fish landings at Santa Cruz, Moss Landing, and Monterey.

Floodplains vary greatly. Try the Flood Emergency Management Association for detailed information. Downtown Scotts Valley estimate is 50 year.

a/ta/scotts/cr

CONTACT REPORT

AGENCY/AFFILIATION: Ashland Machine		
DEPARTMENT:		
ADDRESS/CITY: 5998 Butler Lane/Scotts Valley		
COUNTY/STATE/ZIP: Santa Cruz/California/95066		
CONTACT(S)	**TITLE**	**PHONE**
1. Judy Pitts	Bookkeeper	(408) 438-3232
2. Ernest Pitts	Manager	(408) 438-3232
E & E PERSON MAKING CONTACT: Kenyon A. Larsen		**DATE:** 8-29-89
SUBJECT: Current status of J & E site		
SITE NAME: J & E Machine		**EPA ID#:** CAD041473216

Ashland Machine is a different company than J & E Machine. J & E Machine and N.C. Mattic went bankrupt in 1986. Ashland Machine opened in November 1985 and is owned by Scott Pitts, the son of Ernest and Judy Pitts. Ernest is now the manager of the company.

Ashland Machine conducts similar work as J & E Machine did but a slightly different process is used. Instead of using solvents to clean machined parts, Ashland uses a mixture of Ajax cleanser and rocks, which is discharged to the municipal sewer system. Because of this change in processes, Ashland does not need hazardous materials permits from the city of Scotts Valley.

c/kl/ashland/cr

CONTACT REPORT

AGENCY/AFFILIATION: City of Scotts Valley		
DEPARTMENT: Water District		
ADDRESS/CITY: 2 Civic Center Dr./Scotts Valley		
COUNTY/STATE/ZIP: Santa Cruz/California/95066		
CONTACT(S)	**TITLE**	**PHONE**
1. John Sansing	General Manager	408-438-2363
2.		
E & E PERSON MAKING CONTACT: Kenyon A. Larsen		**DATE:** 5/15/90
SUBJECT: Groundwater and surface water flow and Geology		
SITE NAME: Technical Plastics/J & E Machine		**EPA ID#:** CAD981433287

The general groundwater flow direction in the Janis Way area is southward from Carbonero Creek. This is the groundwater direction in the Santa Margarita aquifer, and is probably the same for the perched zone.

Carbonero Creek is a major recharge source for the Santa Margarita aquifer in the Janis Way area. Carbonero Creek loses a great deal of flow along Janis Way due to this recharge of the aquifers.

Carbonero Creek does not flow year round. It is fed solely from rain runoff from the surrounding mountains. No reservoirs control the creeks flow. The rainfall was very low this year and normally Carbonero Creek would not be running, but it is quite high probably due to the shifting of water layers and the opening of new springs after the winter earthquakes.

A report completed for the California Department of Health Services on the Scotts Valley Circuits facility off of El Pueblo Drive may have geology information. The geology there should be similar to that near the creek and Janis Way. A perched aquifer zone was identified at that facility as suspected near Janis Way. Recharge of the perched water zone is probably from Carbonero Creek too.

kal/tp/clcr

CONTACT REPORT

AGENCY/AFFILIATION: Scotts Valley Water District		
DEPARTMENT:		
ADDRESS/CITY: 2 Civic Center Drive, Scotts Valley		
COUNTY/STATE/ZIP: Santa Cruz, CA 95066		
CONTACT(S)	**TITLE**	**PHONE**
1. Daryll Ellis	Operations Manager	408/438-2363
2.		
E & E PERSON MAKING CONTACT: A. Glasner		**DATE:** 5/16/90
SUBJECT: Wells		
SITE NAME: Skypark Airport/J & E Machine		**EPA ID#:** CAD980893291

Well #9 is the closest to the airport leachfield. Well #9 is mostly used as a backup because it is filtered to remove benzene. Wells Nos. 9, 10, and the Hidden Oaks well go to a joint distribution system. After water from Well #11 and the El Pueblo well field is treated it goes to the joint distribution system also. In general, water from different areas is isolated by pressure zones.

There are 2,888 service connections at present. The county average is 2.5 people/connection.

Well 3A is the closest to the Janis Way area. Well 3A is about 0.25 miles South (downgradient) of Pettifone and the 19 and 27 Janis Way facilities.

Scotts Valley gets all its drinking water from groundwater wells. This groundwater is also used for industrial purposes.

kl/pettibone/clcr

CONTACT REPORT

AGENCY/AFFILIATION: San Lorenzo Valley Water District		
DEPARTMENT:		
ADDRESS/CITY: P.O. Box H		
COUNTY/STATE/ZIP: Santa Cruz County, California		
CONTACT(S)	**TITLE**	**PHONE**
1. Roxanne Spring		408-338-2153
2.		
E & E PERSON MAKING CONTACT: Kimberly Hall		**DATE:** 6/6/90
SUBJECT: Well information		
SITE NAME: Scotts Valley Circuits/J & E Machine		**EPA ID#:** CAD063564132

Currently, the San Lorenzo Valley Water District maintains 512 connections to their "southern" system. This blended system consists solely of groundwater and includes water taken from their Scotts Valley wells. This regionally blended system may be blended in the future with the company's larger "northern" system.

kh/svc/clcr

CONTACT REPORT

AGENCY/AFFILIATION: City of Scotts Valley		
DEPARTMENT: Fire Department		
ADDRESS/CITY: 7 Erba lane, Scotts Valley		
COUNTY/STATE/ZIP: Santa Cruz County, CA, 95066		
CONTACT(S)	**TITLE**	**PHONE**
1. Mel Angel	Fire Chief	408-438-0211
2.		
E & E PERSON MAKING CONTACT: Kenyon A. Larsen		**DATE:** 6/13/90
SUBJECT: Fire Department involvement in El Pueblo Road Study sites		
SITE NAME: Technical Plastics/J & E Machine		**EPA ID#:** CAD981433287

The Scotts Valley Fire Department (SVFD) is currently responsible for handling hazardous waste management in Scotts Valley. SVFD took this responsiblility from the City of Scotts Valley on May 1, 1990. SVFD is new at this capacity and is just becoming fimiliar with what information is available.

Chief Angel stated that they had little or no information about the Technical Plastic facility at either address. SVFD is apparently responsible for updating Hazardous Materials Management Plans and responding to emergencies. There is no active enforcement measures currently being carried out in the El Pueblo Road area.

kal/tp/cr